

# Kindlin-3 Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M	Endogenous	75	Rabbit	#Q86UX7	83706

## Product Usage Information

### Application

Western Blotting

### Dilution

1:1000

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

Kindlin-3 Antibody recognizes endogenous levels of total kindlin-3 protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly649 of human kindlin-3 protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

The kindlin family of focal adhesion proteins is involved in multiple biological processes, including integrin signaling, adhesion, migration, angiogenesis, differentiation, and mitotic spindle formation (1,2). Kindlin family members 1, 2, and 3 (FERM1, FERM2, and URP2) are differentially expressed in tissues. Kindlin-1 is primarily expressed in epithelial cells, kindlin-2 is ubiquitously expressed, and kindlin-3 expression is restricted to the hematopoietic system (3).

Kindlin-3 (FERMT3 or URP2) is a member of the kindlin family of focal adhesion proteins, which plays an essential role in integrin activation and in various immune functions (3,4). Kindlin-3 is mainly expressed in the hematopoietic system (5). Kindlin-3, together with talin, binds to the cytoplasmic tail of  $\beta$ -integrin and activates integrin-mediated signaling cascades (6-8). Research studies identified mutations of Kindlin-3 that cause a rare hereditary human disease, leukocyte-adhesion deficiency (LAD) type III (9,10).

## Background References

1. Ye, F. and Petrich, B.G. (2011) *Curr Opin Hematol* 18, 356-60.
2. Meves, A. et al. (2009) *Trends Cell Biol* 19, 504-13.
3. Karaköse, E. et al. (2010) *J Cell Sci* 123, 2353-6.
4. Fagerholm, S.C. et al. (2014) *Am J Clin Exp Immunol* 3, 37-42.
5. Pasini, E.M. et al. (2006) *Blood* 108, 791-801.
6. Tadokoro, S. et al. (2003) *Science* 302, 103-6.
7. Wegener, K.L. et al. (2007) *Cell* 128, 171-82.
8. Moser, M. et al. (2009) *Science* 324, 895-9.
9. Malinin, N.L. et al. (2009) *Nat Med* 15, 313-8.
10. Svensson, L. et al. (2009) *Nat Med* 15, 306-12.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human **M:** Mouse

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